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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,870	12/02/2003	Masashi Goto	2204-11-3	5414
996	7590	09/29/2005	EXAMINER	
GRAYBEAL, JACKSON, HALEY LLP			NGUYEN, DAO H	
155 - 108TH AVENUE NE			ART UNIT	
SUITE 350			PAPER NUMBER	
BELLEVUE, WA 98004-5901			2818	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,870

Applicant(s)

GOTO ET AL.

Examiner

Dao H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1203.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the communications dated 12/02/2003 through 09/19/2005.

Claims 1-5, and 13-17 are active in this application.

Claim(s) 6-12 and 18-25 have been cancelled. This cancellation has been made along with an election without traverse to prosecute the invention of Group I, claims 1-5 and 13-17, drawn to semiconductor devices, filed 09/19/2005.

Applicant has the right to file a divisional application covering the subject matter of the non-elected claims.

Acknowledges

2. Receipt is acknowledged of the following items from the Applicant.

Information Disclosure Statement (IDS) filed on 12/2/2003. The references cited on the PTOL 1449 form have been considered.

Applicant is requested to cite any relevant prior art if being aware on form PTO-1449 in accordance with the guidelines set for in M.P.E.P. 609.

Foreign Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim(s) 1, 3, 14, and 15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, 14, and 15 are not clearly defined and distinctly pointed out the subject matter which is claimed as the Applicant's invention. Claims 3, and 15 contain or repeat all limitations of claims 1 and 14, respectively.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim(s) 1-5, and 13-17 are rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 6,613,695 to Pomarede et al.

Regarding claim 1, Pomarede discusses a dielectric film, as shown in figs. 4, for example, formed directly or indirectly on at least a part of a glass substrate or a plastic substrate 200, comprising silicon oxide (SiO_2 , col. 2, lines 22-35 and lines 46-54) in a part at least in the direction of the film thickness, the composition ratio of silicon and oxygen being 1:2, which is between 1:1.94 and 1:2 both inclusive. See further col. 2, lines 11-59.

Regarding claim 2, Pomarede discusses about a dielectric film formed directly or indirectly, as shown in figs. 4, for example, on at least a part of a glass substrate or a plastic substrate (col. 5, line 65 to col. 6, line 7), comprising silicon nitride (Si_3N_4 , col. 2, lines 46-54) in a part at least in the direction of the film thickness, the composition ratio of silicon and nitrogen being 3:4, which is between 3:3.84 and 3:4 both inclusive. See further col. 2, lines 11-59.

Regarding claim 3, Pomarede discusses about a dielectric film formed directly or indirectly on at least a part of a glass substrate or a plastic substrate (col. 5, line 65 to

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col. 6, line 7), comprising silicon oxide (SiO_2 , col. 2, lines 22-35 and lines 46-54) in which the composition ratio of silicon and oxygen is 1:2, which is between 1:1.94 and 1:2 both inclusive. See further col. 2, lines 11-59.

Regarding claim 4, Pomarede discloses the dielectric film wherein a silicon layer or a silicon compound layer is formed directly or indirectly on at least a part of said glass substrate or said plastic substrate, and wherein said dielectric film is formed on at least a part of said silicon layer or said silicon compound layer (device elements such as source/drain formed beneath the gate dielectric).

Regarding claim 5, Pomarede discloses the dielectric film wherein said plastic substrate is made of polyimide resin, polyetherketone resin, polyethersulfone resin, polyetherimide resin, polyethylenenaphthalate resin or polyester resin. See col. 5, line 65 to col. 6, line 7.

Regarding claim 13, Pomarede discusses about a semiconductor device having a dielectric film formed on at least a part of a silicon layer (device elements such as source/drain formed beneath the gate dielectric) formed directly or indirectly on at least a part of a glass substrate or a plastic substrate (col. 5, line 65 to col. 6, line 7), said dielectric film comprising silicon oxide (SiO_2 , col. 2, lines 22-35 and lines 46-54) in which the composition ratio of silicon and oxygen is 1:2, which is between 1:1.94 and

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1:2 both inclusive in a part at least in the direction of the film thickness. See further col. 2, lines 11-59.

Regarding claim 14, Pomarede discusses about a semiconductor device having a dielectric film formed on at least a part of a silicon layer (device elements such as source/drain formed beneath the gate dielectric) formed directly or indirectly on at least a part of a glass substrate or a plastic substrate (col. 5, line 65 to col. 6, line 7), said dielectric film comprising silicon nitride (Si_3N_4 , col. 2, lines 46-54) in which the composition ratio of silicon and nitrogen is between 3:3.84 and 3:4 both inclusive in a part at least in the direction of the film thickness. See further col. 2, lines 11-59.

Regarding claim 15, Pomarede discusses about a semiconductor device having a dielectric film formed on at least a part of a silicon layer (device elements such as source/drain formed beneath the gate dielectric) formed directly or indirectly on at least a part of a glass substrate or a plastic substrate (col. 5, line 65 to col. 6, line 7), said dielectric film comprising silicon nitride (Si_3N_4 , col. 2, lines 46-54) in which the composition ratio of silicon and nitrogen is between 3:3.84 and 3:4 both inclusive in a part at least in the direction of the film thickness. See further col. 2, lines 11-59.

Regarding claim 16, Pomarede discusses about a semiconductor device wherein said dielectric film constitutes a part of a gate dielectric layer (col. 2, lines 46-54) relative to the direction of the thickness of the gate dielectric layer.

Regarding claim 17, Pomarede discusses about a semiconductor device wherein said plastic substrate is made of polyimide resin, polyetheretherketone resin, polyethersulfone resin, polyetherimide resin, polyethylenenaphthalate resin or polyester resin. See col. 5, line 65 to col. 6, line 7.

Conclusion

9. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao H. Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday, 9:00 AM – 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax numbers for all communication(s) is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

A handwritten signature in black ink, appearing to read 'Dao H. Nguyen', with a long horizontal stroke extending to the right.

Dao H. Nguyen
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September 26, 2005

A handwritten signature in black ink, appearing to read 'David Nelms', with a large loop at the top.

David Nelms
Supervisory Patent Examiner
Technology Center 2800